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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,374	08/07/2001	Erik Dahlman	8194-585	8934
20792	7590	04/14/2006	EXAMINER	
MYERS BIGEL SIBLEY & SAJOVEC			KUMAR, PANKAJ	
PO BOX 37428			ART UNIT	PAPER NUMBER
RALEIGH, NC 27627			2611	

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/923.374

Applicant(s)

DAHLMAN ET AL.

Examiner

Pankaj Kumar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/2/2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-70 and 72-108 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 69, 70 and 72-85 is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-17, 21-28, 32-37, 45, 46, 49-51, 53, 54, 57-61, 86-89 and 97-108 is/are rejected.
- 7) ☒ Claim(s) 10, 18-20, 29-31, 38-44, 47, 48, 52, 55, 56, 62-68 and 90-96 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION***Response to Arguments***

1. Applicant's arguments filed have been fully considered but they are moot in view of the new ground of rejection.

Response to Amendment***Information Disclosure Statement***

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 12, 32, 50, 53, 58, 86, 99, 2, 13, 100, 3, 14, 101, 15, 21, 97, 98, 4, 22, 33, 102, 5, 23, 34, 103, 6, 24, 35, 104, 8, 26, 37, 106, 11, 28, 108, 7, 25, 36, 105, 16, 17, 45, 46, 51, 54, 59, 87, 61, 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Urabe USPN 6,181,749 in view of Atarius.

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5. As per the claims, Urabe teaches to produce a first symbol representation for a symbol (Urabe: abstract); determining a first quality for the first symbol representation (Urabe fig. 9: data detection result d8 processing both channels and determining if one or both channels are valid); and responsive to the determined first quality (Urabe fig. 9: both channel valid), determining whether to further process the first symbol representation or to process a second symbol representation for the symbol generated from the spread spectrum signal (Urabe fig. 9: responsive to data detection result d8 and both channels valid, determining whether to further process the first channel or the second channel after at least symbol number comparison). Urabe does not teach correlating the spread spectrum signal with a spreading sequence at a first plurality of correlation times to produce a first plurality of time-offset correlations; processing the first plurality of time-offset correlations. Atarius teaches correlating the spread spectrum signal (Atarius fig. 3: input signal; pg.1 line 4: spread spectrum; pg. 1 line 9: correlation) with a spreading sequence (Atarius fig. 3: chip sequences) at a first plurality of correlation times (Atarius pg. 2 line 26-pg.3 line 3; pg. 1 lines 8-10; fig. 3: 320, 322, 330, 332) to produce a first plurality of time-offset correlations (Atarius fig. 3: output of 320, 322, 330, 332); processing the first plurality of time-offset correlations (Atarius fig. 3: 340, 342, 350, 352, 362, 364). It would be obvious to combine since Urabe teaches signal spread over a spectrum (Urabe col. 16 line 49) (something broad) in general and Atarius teaches the beneficial use of time offset correlating the spread spectrum signal as claimed (Atarius fig. 3: input signal; pg.1 line 4: spread spectrum; pg. 1 line 9: correlation; pg. 2 line 26-pg.3 line 3; pg. 1 lines 8-10; fig. 3: chip sequences; 320, 322, 330, 332; output of 320, 322, 330, 332; 340, 342, 350, 352, 362, 364) such as in order to decode the signal correctly (Atarius page 3 lines 2-3, 6-12, page 9 line 2, fig. 5: correlation scheme is

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multipath or delay profile which must be combined in a proper way in order to optimally detect the spread spectrum signal with a high signal to noise ratio in order for the signal to be decoded correctly by minimizing the noise) in the analogous art of communication.

6. Claims 9, 27, 49, 57, 60, 88, 107 are rejected under 35 U.S.C. 103(a) as being unpatentable over Urabe in view of Atarius as discussed above and further in view of applicant's background of the invention.

7. As per claim 9, 27, 49, 57, 60, 88, 107, Urabe in view of Atarius does not teach G-rake. Applicant's background of the invention teaches the method or apparatus of an earlier claim, wherein the first symbol representation is an output of a demodulation process and wherein the second symbol representation is an output of a generalized (G-RAKE) demodulation process (applicant's specification background of the invention such as page 2 lines 8 to page 3 line 6). It would be obvious to combine since Urabe in view of Atarius teaches Rake and demodulation (something broad) in general and applicant's specification background of the invention teaches the beneficial use of G-Rake such as to receive optimum reception (applicant's specification background of the invention page 2 line 10) in the analogous art of communication.

Allowable Subject Matter

8. Claims 69, 70, 72-85 are allowed. See a prior action for details.

9. Claims 10, 18, 19, 20, 29, 30, 31, 38, 39, 40-42, 43, 44, 47, 48, 52, 55, 56, 62, 63-68, 90, 91, 92, 93, 94, 95, 96 are objected to as being dependent upon a rejected base claim, but would

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be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pankaj Kumar whose telephone number is (571) 272-3011. The examiner can normally be reached on Mon, Tues, Thurs and Fri after 8AM to after 6:30PM.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Pankaj Kumar
Patent Examiner
Art Unit 2611

PK